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View Point

Is science lagging behind society? : Why psychiatrists must play the devil's advocate

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Abstract

"When I discover who I am, I'll be free."- Ralph Ellison

An ever-increasing flux of transgender persons interacting with mental health care providers in the last decade warrants close scrutiny of the available evidence for gender-affirming medical interventions. This issue becomes significantly more pertinent when it comes to pre-pubertal children raising questions about gender identity and seeking guidance and help. The wide regional variation in laws concerning this highlights the undeniable sociocultural impact on this purportedly biological phenomenon. In recent years, terms like 'rapid onset gender dysphoria' and 'de-transitioning' shine a light on the other side of the coin. Doctors, especially psychiatrists, must take the narrative with a pinch of salt and regard the available evidence through the lens of healthy scientific skepticism.

Keywords: Gender dysphoria, Transgender, De-transitioning, Gender identity

Introduction

Genderdysphoria refers to strong and persistent distress experienced by an individual arising out of a mismatch between the assigned gender at birth and their own personal sense of gender with which they may identify.[1] Gender non-conformity is different from gender dysphoria and is not associated with psychological distress.[2] Individuals who are gender non-conforming, as well as those with gender dysphoria, are often referred to as transgendered persons, who further fall under the wider umbrella of the LGBTQIA+community.[3]

The available and ongoing research as to the underlying causes, presentation, degree of distress and impairment, confounding social and cultural factors, and modes of management is mired in debate with significant differences of opinion amongst researchers, authors, medical practitioners, mental health care providers, lobbyists and politically motivated persons.[4]

In a fast-changing world where we grapple to understand the meaning and implications of gender and sexuality, this article aims to highlight the shaky foundations of evidence that are increasingly being used to support or oppose various viewpoints, especially regarding management, with a focus on the role of psychiatrists.

Born this way vs Made this way - the eternal debate

A growing body of scientific evidence points to

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persons with gender dysphoria being biologically and developmentally different in several ways. Distinct gray matter volume and brain activation and connectivity differences, altered functioning of the amygdala and hippocampus, and functional connectivity and activation change, especially in the anterior cingulate cortex and ventral striatum as well as the precuneus and right occipito-parietal cortex point to neurobiological underpinnings of gender dysphoria; but the findings are sparse at best.[5-7] A large consortium study in Europe and United States is underway and aims to look at genetic causation.[8]

One cannot overlook the years of research assessing mental health issues and adverse childhood experiences faced by such persons. The prevalence of psychiatric morbidity is higher in transgender persons as compared to gender-confirming persons, and among them, mood disorders, anxiety, and substance use disorders are the most common.[9,10] Several studies over the last two decades have shown that transgender persons are at a higher risk of having experienced adverse childhood experiences (including abuse, violence, and substance abuse in a parent) as compared to non-transgender population; and these are further associated with poor health outcomes in transgender persons.[11-14] A recent mediation analysis found that adverse childhood experiences were associated with increased discrimination, increased mental distress, and poorer health. Furthermore, increased gender non-affirmation was associated with discrimination and mental distress.[15]

Thus, it would be overly simplistic to label the relationship between gender identity issues and mental illness as causative one way or the other; rather, the processes are bidirectional with each affecting the other and are further complicated by socio-cultural factors.

Is psychiatry's current stance an over compensation of its erstwhile pathologizing view of the LGBTQIA+ community?

Unfortunately, psychiatry bears the dark marks of conversion therapy and treating differences in sexual orientation and gender orientation as pathological up until quite recently.[16] Starting at the turn of the 20th century, with growing research, awareness, changes in the socio-political sphere and active lobbying by key stakeholders, the wheels of change began to turn with the diagnosis of 'gender identity disorder' being removed from the DSM and ICD in 2013 and 2019, respectively,[17,18] followed by statements condemning conversion therapy as an unscientific practice and seeking greater regulation from various international bodies.[19,20]

However, the question must be asked: are psychiatrists being unduly permissive in their approach to the matter in a bid to erase their punitive past - so much so, that any attempt at holding a scientific debate in the matter to understand and explore the psychological origins of differences in gender identity and sexuality are quickly shut down and labelled 'transphobic'.[21,22]

Understanding and managing gender identity issues in pre-pubertal age group

Fluidity in sexual orientation and gender identity during pre-pubertal years and early childhood is a widely recognized phenomenon. It is understood better, with gender roles and stereotypes becoming less restrictive over the last two decades.[23] However, in recent years, there has been a tendency on the part of healthcare workers as well educators and parents to succumb to a hurried rush to 'label' the pre-pubertal child as transgender or gender non-conforming and subsequently initiate supportive measures in the form of counseling and at times, also considering pharmacological treatment for the same.

Ethical issues in hormonal treatment in pre-pubertal age group

Worldwide, the legal age for most actions of significance, such as consenting for surgery, consenting for sexual activity, marriage, voting, etc. is over 18 years. The age for drinking in many areas varies between 21-25 years. Indeed, there is compelling evidence to show the development of the brain, especially the prefrontal cortex - the region key in decision-making and judgement, is not complete before 25 years of age.[24] One's personality and intellectual abilities continue to evolve at least up till 25 years of age, if not beyond.[25] In light of these facts, it becomes very relevant to address the ethical justification of one, diagnosing gender dysphoria in individuals before 18-25 years of age, before they have had varied homo and hetero sexual interactions across a wide

variety of settings and two, prescribing hormonal treatment to delay or 'block' the onset of puberty in them.

An article published in the BMJ in 2023 adjudged the quality of evidence for recommending hormonal treatment in transgender adolescents as 'low' or 'very low'. It further underlined the potentially disastrous impact on cardiovascular, metabolic and skeletal health associated with hormone treatment in adolescents.[26] The public guidance offered by the WPATH (World Professional Association for Transgender Health) in its recommendations is murky at best -neither clearly recommending nor clearly denouncing the use of hormonal treatment in adolescents with gender dysphoria.[2]

The ethical conundrum surrounding this shot to light in July 2022 marked the end of an era with the order for shutting down the Gender Identity Development Service (GIDS) offered by the Tavistock and Portman NHS Foundation Trust, after almost 35 years of existence.[27,28] The original mission of the service was reflected in its name - that is, to support gender identity development versus change. Over the last decade, internal audits revealed accelerated time frames from referral to prescription of 'puberty blockers' or approval for sex reaffirming surgery largely owing to the massive rise in referrals and case load. Some psychiatrists working in the facility expressed their concern over the inadequate and rushed psychiatric assessments but were allegedly silenced by the higher ups for being 'transphobic'. This culture extended also to social workers, school teachers and even parents who may refuse to refer the child to the GIDS; making them liable for legal punitive action.[29]

Broadening the scope of the 'birds and bees' talk: when is the right time?

Sex education in schools is not new. It forms an important and integral part of educating children about sexuality, attraction, biology, hygiene, safety, and healthy boundaries. However, in recent years, several schools in the West, especially the US and UK, have included 'gender theory' as part of the curriculum when it comes to sex education. Furthermore, this is disseminated to children around 4-6 years of age instead of the conventional middle school age group; and parental consent is not necessary for the same. This has been met with pushback in several US states. Proponents of introducing gender theory to pre-schoolers argue that as gender fluidity and genders other than male and female are 'normal' - they should be introduced to children at a young age as some studies show that a child has a basic understanding of gender and even a stable gender identity by 4 years of age.[30] However, critics point out that the minds of children are ever-changing, are impressionable especially by authority figures like teachers, and premature introduction of this information may have the unwanted effect of implanting an erstwhile non-existent confusion about their identity. The issue of parental consent also continues to be an important critique. [31] Whether earlier sex education can do more harm than good remains a point of debate - with a 2002 American study reporting mixed findings both within and between genders.[32] As of now, the Indian education system does not require the introduction of gender theory in school curricula. Perhaps an approach that focusses on not conforming to stereotypes rather than gender is more suitable as introductory information. [33]

Role of social media

Social media plays an important role when it comes to transgender persons, especially children and adolescents. While most literature focusses on the use of social media by transgender persons, especially adolescents, as a means to find respite from discrimination in the real world and to connect with peers and participate in support groups[34]; it would be naïve to assume that the carefully designed algorithms of most social media platforms do not influence or shape the way young people perceive and understand their changing bodies, minds, gender identity and sexuality. In fact, the latter plays out in the form of an entity that is now being recognised in recent years - termed 'rapid onset gender dysphoria', which is characterized by a sudden onset of gender dysphoria at the time of or after puberty, without any preceding expression of the same.[35] Social media functions as a double edged sword - on one hand, it is a helpful tool for support and development of a sense of community for trans persons; on the other, it is a medium for disseminating unscientific and at times, dangerous advice especially regarding treatment - be it medical or surgical.

De-transitioning

Gender detransition is the act of stopping or reversing the social, medical, and/or administrative changes achieved during a gender transition process. It is an emerging phenomenon of significant clinical and social interest.[36] A recent review spanning research conducted over 12 years noted that discontinuation of medical treatment was the most common, followed by regret associated with hormonal and surgical treatment. [36] A mixed-methods analysis in 2021 noted external factors (family and societal stigma) as well as internal factors (fluctuations in or uncertainty regarding gender identity) to be the driving factors behind de-transitioning.[37] In two case reports, increased self-esteem, bodily satisfaction, and self-empowerment, along with improved social and interpersonal support, were understood as reasons for discontinuation of gender affirming treatments.[38] A similar but larger qualitative study conducted in Canada in 2021 included 28 gender non-confirming adults who de-transitioned and noted health care avoidance, clinician stigma, and ignorance to be key factors associated with dissatisfaction with gender affirming treatments.[39]

Indian context

Research in India on transgender issues is on the rise but is contributed to more by social scientists rather than psychiatrists or psychologists. The deep-rooted role of Hijras in Indian culture highlights the need for more culturally-oriented research. Accordingly, it warrants a culturally-sensitive understanding of gender dysphoria in the Indian setting.[40,41] Significant barriers exist for trans persons in India when it comes to availing surgical or hormonal treatment. This treatment gap is further widened by societal stigma, affordability issues, lack of awareness on the part of patients as well as doctors, and negative attitudes on the part of medical care providers. Due to this, several transfeminine persons resort to visiting unqualified persons for 'surgery' or undergoing Dai Nirvana, a traditional but risky method of removing male genitalia practiced within the hijra communities. [42, 43] Current Indian guidelines recommend a thorough psychiatric assessment before a person can avail of hormonal or surgical gender-affirming treatment. [44]

Conclusion

A fitting example of history repeating itself - gender dysphoria and the issues surrounding transgender and gender non-conforming identities, including etiology and management -is a sociocultural construct that science and evidence are still playing catch-up to. Research is evolving and as yet insufficient to draw definitive conclusions; with authorities and consensus groups rushing to work with what they have. The matter is further complicated by the overly political tone that scientific enquiry may take on in this case. Whatever our academic disagreements and personal convictions, as psychiatrists and doctors, the principle of non-maleficence should always take precedence. As such, one must proceed with caution when formulating and propagating opinions on semi-permanent or permanent measures such as hormonal treatment and sex-reaffirming surgery - especially in the younger population; without extensive and thorough medical, psychiatric, and psychosocial evaluation. Continued evaluation and open conversation are key, rather than rushing to conclusions and taking life-altering decisions in the face of sparse scientific evidence.

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References

1. Morrow DF, Messinger L, editors. Sexual Orientation and Gender Expression in Social Work Practice: Working with Gay, Lesbian, Bisexual, and Transgender People. Columbia University Press; 2006.
2. Coleman E, Radix AE, Bouman WP, Brown GR, De Vries ALC, Deutsch MB, et al. Standards of Care for the Health of Transgender and Gender Diverse People, Version 8. International Journal of Transgender Health 2022;23(sup1):S1-259.
3. admin SF. LGBTQIA Resource Center - LGBTQIA Resource Center Glossary [Internet]. 2015 [cited 2024 Feb 14];Available from: https://lgbtqia.ucdavis.edu/educated/glossary
4. Davy Z, Toze M. What Is Gender Dysphoria? A Critical Systematic Narrative Review. Transgend Health 2018;3(1):159-69.
5. Altinay M, Anand A. Neuroimaging gender dysphoria: a novel psychobiological model. Brain Imaging and Behavior 2020;14(4):1281-97.
6. Manzouri A, Savic I. Possible Neurobiological Underpinnings of Homosexuality and Gender Dysphoria. Cerebral Cortex 2019;29(5):2084-101.

7. Garg G, Elshimy G, Marwaha R. Gender Dysphoria [Internet]. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2024 [cited 2024 Feb 14]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK532313/

8. Trotta D. Born this way? Researchers explore the science of gender identity [Internet]. Reuters2017 [cited 2024 Feb 13];Available from: https://www.reuters.com/article/idUSKBN1AJ0EG/

9. de Freitas LD, Léda-Rêgo G, Bezerra-Filho S, Miranda-Scippa Â. Psychiatric disorders in individuals diagnosed with gender dysphoria: A systematic review. Psychiatry and Clinical Neurosciences 2020;74(2):99-104.

10. Arcelus CD Roy Van Vlerken, Gunter Heylens, Jon. Mental health and gender dysphoria: A review of the literature. In: Gender Dysphoria and Gender Incongruence. Routledge; 2017.

11. Austin A, Herrick H, Proescholdbell S. Adverse Childhood Experiences Related to Poor Adult Health Among Lesbian, Gay, and Bisexual Individuals. Am J Public Health 2016;106(2):314-20.

12. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine 1998;14(4):245-58.

13. Suarez NA, Peitzmeier SM, Potter J, Samandur A, Reisner SL. Preliminary findings for adverse childhood experiences and associations with negative physical and mental health and victimization in transmasculine adults. Child Abuse & Neglect 2021;118:105161.

14. Schnarrs PW, Stone AL, Salcido R, Baldwin A, Georgiou C, Nemeroff CB. Differences in adverse childhood experiences (ACEs) and quality of physical and mental health between transgender and cisgender sexual minorities. Journal of Psychiatric Research 2019;119:1-6.

15. Strenth CR, Smith M, Gonzalez L, Grant A, Thakur B, Levy Kamugisha EI. Mediational pathways exploring the link between adverse childhood experiences and physical health in a transgender population. Child Abuse & Neglect 2024;149:106678.

16. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. Journal of Consulting and Clinical Psychology 1994; 62 (2): 221-7.

17. Gender Dysphoria Diagnosis [Internet]. [cited 2024 Feb 13]; Available from: https://www.psychiatry.org:443/psychiatrists/diversity/education/transgender-and-gender-nonconforming-patients/gender-dysphoria-diagnosis

18. Lewis S. Gender identity disorder: World Health Organization removes gender dysphoria from list of mental illnesses, a win for transgender rights - CBS News [Internet]. 2019 [cited 2024 Feb 13];Available from: https://www.cbsnews. com/news/world-health-organization-removes-gender-dysphoria-from-list-of-mental-illnesses/

19. Drescher J, Shidlo A, Schroeder M. Sexual Conversion Therapy: Ethical, Clinical and Research Perspectives. CRC Press; 2002.

20. Alempijevic D, Beriashvili R, Beynon J, Birmanns B, Brasholt M, Cohen J, et al. Statement on conversion therapy. Journal of Forensic and Legal Medicine 2020;72:101930.

21. Williams J. The Corrosive Impact of Transgender Ideology [Internet]. Civitas; 2020 [cited 2024 Feb 13]. Available from: https://civitas. org.uk/content/files/2454-A-The-Corrosive-Impact-of-TI-ppi-110-WEB.pdf

22. White KM. The scientific revolt against gender ideology has begun [Internet]. Washington Examiner2023 [cited 2024 Feb 13];Available from: https://www.washingtonexaminer.com/opinion/beltway-confidential/2777198/the-scientific-revolt-against-gender-ideology-has-begun/

23. Perry DG, Pauletti RE, Cooper PJ. Gender identity in childhood: A review of the literature. International Journal of Behavioral Development 2019;43(4):289-304.

24. Arain M, Haque M, Johal L, Mathur P, Nel W, Rais A, et al. Maturation of the adolescent brain. NDT 2013;9:449-61.

25. Roberts BW, Mroczek D. Personality Trait Change in Adulthood. Curr Dir Psychol Sci 2008;17(1):31-5.

26. Block J. Gender dysphoria in young people is rising-and so is professional disagreement. BMJ 2023;380:p382.

27. Barnes H. Why the Tavistock gender identity clinic was forced to shut ... and what happens next [Internet]. The Observer2024;Available from: https://www.theguardian.com/society/2024/mar/31/why-the-tavistock-gender-identity-clinic-was-forced-to-shut-and-what-happens-next

28. Brooks L. "A contentious place": the inside story of Tavistock's NHS gender identity clinic [Internet]. The Guardian 2023; Available from: https://www.theguardian.com/society/2023/ja

n/19/a-contentious-place-the-inside-story-of-tavistocks-nhs-gender-identity-clinic

29. Barnes H. Time to Think: The Inside Story of the Collapse of the Tavistock's Gender Service for Children [Internet]. Swift Press; 2023 [cited 2024 Feb 14]. Available from: https://books.google.com/books?hl=en&lr=&id=5k2GEAAAQBAJ&oi=fnd&pg=PT5&dq=time+to+think+hannah+barnes&ots=VcaTWNtMRx&sig=r9EqZ_V9D9HYmRdKvOLpb3Q0Bgs

30. Klein JD, Alden ER. Children, Gender, Education, and Health. Pediatrics 2017;140(1):e20171322.

31. Evans J. Is It OK to Teach Gender Fluidity to Your Elementary-age Children? [Internet]. Balanced Growth2023 [cited 2024 Feb 13]; Available from: https://medium.com/balanced-reh-print-blog/is-it-ok-to-teach-gender-fluidity-to-your-elementary-age-children-af035681c15e

32. Somers CL, Eaves MW. Is Earlier Sex Education Harmful?: An Analysis of the Timing of School-Based Sex Education and Adolescent Sexual Behaviours. Research in Education 2002;67 (1): 23-32.

33. Children's Day: Start them young, gender sensitise them at school and home [Internet]. Hindustan Times2017 [cited 2024 Feb 13]; Available from: https://www. hindustantimes.com/education/children-s-day-start-them-young-gender-sensitise-themat-school-and-home/story-DPglcejpHxKIzRhi3Rx0AM.html

34. Selkie E, Adkins V, Masters E, Bajpai A, Shumer D. Transgender Adolescents' Uses of Social Media for Social Support. Journal of Adolescent Health 2020;66(3):275-80.

35. Littman L. Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. PLOS ONE 2018;13(8):e0202330.

36. Expósito-Campos P, Salaberria K, Pérez-Fernándeza JI, Gómez-Gil E. Gender detransition: A critical review of the literature. Actas Españolas de Psiquiatría 2023;51(3):98-118.

37. Turban JL, Loo SS, Almazan AN, Keuroghlian AS. Factors Leading to "Detransition" Among Transgender and Gender Diverse People in the United States: A Mixed-Methods Analysis. LGBT Health 2021;8(4):273-80.

38. Expósito-Campos P, Gómez-Balaguer M, Hurtado-Murillo F, García-Moreno RM, Morillas-Ariño C, Armstrong H. Medical detransition following transgender identity reaffirmation: two case reports. Sex Health 2021;18(6):498-501.

39. MacKinnon KR, Kia H, Salway T, Ashley F, Lacombe-Duncan A, Abramovich A, et al. Health Care Experiences of Patients Discontinuing or Reversing Prior Gender-Affirming Treatments. JAMA Network Open 2022;5(7):e2224717.

40. Kalra G. Hijras: the unique transgender culture of India. International Journal of Culture and Mental Health 2012;5(2):121-6.

41. Chatterjee S. Transgender Shifts: Notes on Resignification of Gender and Sexuality in India. TSQ: Transgender Studies Quarterly 2018;5(3):311-20.

42. Pandya A kumar, Redcay A. Access to health services: Barriers faced by the transgender population in India. Journal of Gay & Lesbian Mental Health 2021;25(2):132-54.

43. Singh Y, Aher A, Shaikh S, Mehta S, Robertson J, Chakrapani V. Gender Transition Services for Hijras and Other Male-to-Female Transgender People in India: Availability and Barriers to Access and Use. International Journal of Transgenderism 2014;15(1):1-15.

44. Jain D. Right to Health and Gender-Affirmative Procedure in the Transgender Persons Act 2019 in India. Indian J Plast Surg 2022;55(2):205-10.